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L121 ANSWER 1 OF 13 HCAPLUS  COPYRIGHT 2007 ACS on STN
AN   2003:809799  HCAPLUS  Full-text
DN   139:319665
TI   Development of simultaneous and fractional quantitative analysis of
     peracetic acid and hydrogen peroxide
     by continuous oxidation reduction potentiometry
IN   Asa, Kakutoshi; Osaka, Takeo; Mohamed, Isumairu Awado
PA   Riko Kyosan K. K., Japan; Rikogaku Shinkokai
SO   Jpn. Kokai Tokkyo Koho, 7 pp.
     CODEN: JKXXAF
DT   Patent
LA   Japanese
FAN.CNT 1
     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
     --------------      ----   --------    --------------------   --------
PI   JP 2003294694        A     20031015    JP 2002-102110         20020404 <--
     JP 3504939           B2    20040308
     CA 2480874           A1    20031016    CA 2003-2480874        20030403 <--
     WO 2003085393        A1    20031016    WO 2003-JP4273         20030403 <--
         W:  CA, CN, KR, US
         RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
             IT, LU, MC, NL, PT, RO, SE, SI, SK, TR
     EP 1491885           A1    20041229    EP 2003-745897         20030403 <--
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, SK
     US 2005084978        A1    20050421    US 2003-509179         20030403 <--
PRAI JP 2002-102110       A     20020404  <--
     WO 2003-JP4273       W     20030403  <--
AB   A method of simultaneous and fractional quantitation of peracetic acid and
     hydrogen peroxide by continuous anal. of change of oxidation reduction
     potential caused by the reaction with potassium iodide reagent (containing
     molybdate salt (Na, K, Ca or ammonium salt, 0.5 .apprx. 1 mmol/l), iodine (0.3
```

.apprx. 2 mmol/l) and **iodide** ion (5 .apprx. 20 mmol/l)) in **buffer** solution (**pH** 5 .apprx. 6). **Iodide** generated by the reaction of constant potential **electrolysis** was designed to be measured by **potentiometry** using **platinum** , **gold** or **carbon** working **electrode**. Quantitation of **peracetic acid** and **hydrogen peroxide** by the developed **potentiometry** system has been demonstrated.

IC ICM **G01N0027-416**
ICS **G01N0027-30**; **G01N0031-00**; **G01N0033-00**

CC 9-7 (Biochemical Methods)

ST development simultaneous quant **potentiometry peracetic acid hydrogen peroxide**

IT **Electrolysis**
(constant potential **electrolysis**; development of simultaneous and fractional quant. anal. of **peracetic acid** and **hydrogen peroxide** by continuous oxidation reduction **potentiometry**)

IT **Potentiometry**
(development of simultaneous and fractional quant. anal. of **peracetic acid** and **hydrogen peroxide** by continuous oxidation reduction **potentiometry**)

IT **79-21-0**, **Peracetic acid** **7722-84-1**, **Hydrogen peroxide**, analysis
RL: **ANT (Analyte)**; **ANST (Analytical study)**
(development of simultaneous and fractional quant. anal. of **peracetic acid** and **hydrogen peroxide** by continuous oxidation reduction **potentiometry**)

IT **7681-11-0**, **Potassium iodide**, uses
11116-47-5, **Molybdate**
RL: **ARG (Analytical reagent use)**; **ANST (Analytical study)**; USES (Uses)
(development of simultaneous and fractional quant. anal. of **peracetic acid** and **hydrogen peroxide** by continuous oxidation reduction **potentiometry**)

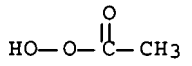
IT **7440-44-0**, Glassy **Carbon**, uses
RL: DEV (Device component use); USES (Uses)
(glassy, use in **electrode**; development of simultaneous and fractional quant. anal. of **peracetic acid** and **hydrogen peroxide** by continuous oxidation reduction **potentiometry**)

IT **7440-06-4**, **Platinum**, uses **7440-57-5**, **Gold**, uses
RL: DEV (Device component use); USES (Uses)
(use in **electrode**; development of simultaneous and fractional quant. anal. of **peracetic acid** and **hydrogen peroxide** by continuous oxidation reduction **potentiometry**)

IT **79-21-0**, **Peracetic acid** **7722-84-1**, **Hydrogen peroxide**, analysis
RL: **ANT (Analyte)**; **ANST (Analytical study)**
(development of simultaneous and fractional quant. anal. of **peracetic acid** and **hydrogen peroxide** by continuous oxidation reduction **potentiometry**)

RN 79-21-0 HCAPLUS

CN Ethaneperoxoic acid (CA INDEX NAME)



RN 7722-84-1 HCAPLUS

CN Hydrogen peroxide (H2O2) (CA INDEX NAME)

HO—OH

IT **7681-11-0, Potassium iodide**, uses
11116-47-5, Molybdate
RL: **ARG (Analytical reagent use)**; **ANST (Analytical study)**; USES (Uses)
(development of simultaneous and fractional quant. anal. of **peracetic acid** and **hydrogen peroxide** by continuous oxidation reduction **potentiometry**)
RN 7681-11-0 HCAPLUS
CN Potassium iodide (KI) (CA INDEX NAME)

I—K

RN 11116-47-5 HCAPLUS
CN Molybdate (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
IT **7440-44-0**, Glassy **Carbon**, uses
RL: DEV (Device component use); USES (Uses)
(glassy, use in **electrode**; development of simultaneous and fractional quant. anal. of **peracetic acid** and **hydrogen peroxide** by continuous oxidation reduction **potentiometry**)
RN 7440-44-0 HCAPLUS
CN Carbon (CA INDEX NAME)

C

IT **7440-06-4, Platinum**, uses **7440-57-5, Gold**, uses
RL: DEV (Device component use); USES (Uses)
(use in **electrode**; development of simultaneous and fractional quant. anal. of **peracetic acid** and **hydrogen peroxide** by continuous oxidation reduction **potentiometry**)
RN 7440-06-4 HCAPLUS
CN Platinum (CA INDEX NAME)

Pt

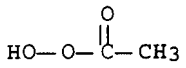
RN 7440-57-5 HCAPLUS
CN Gold (CA INDEX NAME)

Au

L121 ANSWER 2 OF 13 HCAPLUS COPYRIGHT 2007 ACS on STN
AN 2000:31516 HCAPLUS Full-text
DN 132:72974
TI Electrochemical cell with nonporous or microporous silicon membrane separator for aggressive medium
IN Reiss, Gerhard
PA Germany
SO Ger. Offen., 6 pp.
CODEN: GWXXBX
DT **Patent**
LA German
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI DE 19830205	A1	20000113	DE 1998-19830205	19980707 <--
PRAI DE 1998-19830205		19980707 <--		

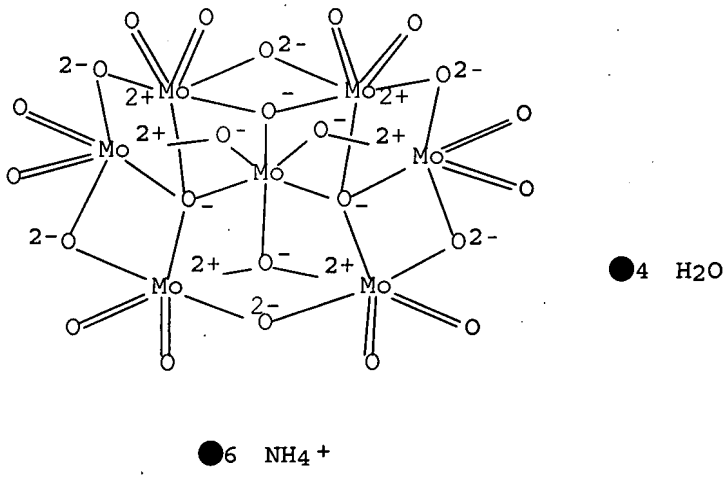
AB An electrochem. measurement cell for use in aggressive media consists of an inner **electrode** and an **electrolyte**-containing chamber, in which a non-porous or microporous silicon membrane separates the **electrolyte** chamber from the measuring fluid. The membrane is 0.05-1.0 mm (preferably 0.125-0.250 mm) thick. The silicon membrane is supported on a supporting ring or support material, fabricated as a gauze or a fabric. The **electrolyte** preferably is composed of a **buffer** solution (at pH 4), **KI**, and ammonium **molybdate** tetrahydrate. The cell is especially useful for determination of chlorine, chlorine dioxide, ozone, **hydrogen peroxide**, or **peracetic acid** solns.
IC ICM **G01N0027-403**
ICS **G01N0027-30**; **G01N0027-40**
CC 79-2 (Inorganic Analytical Chemistry)
ST electrochem cell silicon membrane separator; chlorine electrochem cell silicon membrane separator; **peracetic acid** electrochem cell silicon membrane separator; **hydrogen peroxide** electrochem cell silicon membrane separator
IT **79-21-0**, **Peracetic acid** **7722-84-1**, **Hydrogen peroxide**, analysis 7782-50-5, Chlorine, analysis 10028-15-6, Ozone, analysis 10049-04-4, Chlorine dioxide
RL: **ANT (Analyte)**; **ANST (Analytical study)**
(determination of; electrochem. cell with nonporous or microporous silicon membrane separator for aggressive medium)
IT **7681-11-0**, **Potassium iodide**, uses **12054-85-2**
RL: ARG (Analytical reagent use); DEV (Device component use); ANST (Analytical study); USES (Uses)
(**electrolyte** containing; electrochem. cell with nonporous or microporous silicon membrane separator for aggressive medium)
IT **79-21-0**, **Peracetic acid** **7722-84-1**, **Hydrogen peroxide**, analysis
RL: **ANT (Analyte)**; **ANST (Analytical study)**
(determination of; electrochem. cell with nonporous or microporous silicon membrane separator for aggressive medium)
RN 79-21-0 HCAPLUS
CN Ethaneperoxoic acid (CA INDEX NAME)



RN 7722-84-1 HCAPLUS
CN Hydrogen peroxide (H2O2) (CA INDEX NAME)

IT **7681-11-0, Potassium iodide**, uses
12054-85-2
RL: ARG (Analytical reagent use); DEV (Device component use); ANST (Analytical study); USES (Uses)
(**electrolyte** containing; electrochem. cell with nonporous or microporous silicon membrane separator for aggressive medium)
RN 7681-11-0 HCAPLUS
CN Potassium iodide (KI) (CA INDEX NAME)

RN 12054-85-2 HCAPLUS
CN Molybdate (Mo7O246-), ammonium, hydrate (1:6:4) (CA INDEX NAME)



L121 ANSWER 3 OF 13 HCAPLUS COPYRIGHT 2007 ACS on STN
AN **1995:568517** HCAPLUS Full-text
DN 122:305558
TI Electrochemical sensor for determination of **peroxyacetic acid**
IN Kaden, Heiner; Hermann, Sigrun
PA Forschungsinstitut "Kurt Schwabe" Meinsberg, Germany
SO Ger. Offen., 8 pp.
CODEN: GWXXBX

DT Patent
LA German
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI DE 4319002	A1	19950223	DE 1993-4319002	19930608 <--
PRAI DE 1993-4319002		19930608 <--		

AB Amperometric sensors were developed for selective determination of **peroxyacetic acid** in the presence of **H2O2**. They have **Pt** cathodes, **Ag** anodes (working simultaneously as **Ag**/AgCl reference **electrodes**), and polymer membranes over the cathodes. Polyamides, polyurethanes, or polyethylene terephthalate are used as membrane materials. Linear calibration graphs are observed for 0-3000 ppm **peroxyacetic acid** by using a p.d. = 125 mV in a **pH** 3.2 citrate **buffer** solution

IC ICM **G01N0027-404**

CC 80-2 (Organic Analytical Chemistry)
Section cross-reference(s): 42, 72

ST amperometric sensor **peroxyacetic acid** detn

IT Polyamides, analysis
Polyesters, analysis
Polymers, analysis
Urethane polymers, analysis
RL: **ARU (Analytical role, unclassified)**; DEV (Device component use); **ANST (Analytical study)**; USES (Uses)
(membranes; in amperometric sensors for determination of **peroxyacetic acid**)

IT Sensors
(amperometric, for determination of **peroxyacetic acid**)

IT **79-21-0, Peroxyacetic acid**
RL: **ANT (Analyte)**; PRP (Properties); **ANST (Analytical study)**
(amperometric sensors for determination of)

IT **7722-84-1, Hydrogen peroxide**, analysis
RL: **ARU (Analytical role, unclassified)**; **ANST (Analytical study)**
(amperometric sensors for determination of **peroxyacetic acid** in presence of)

IT 7440-22-4, Silver, analysis
RL: **ARU (Analytical role, unclassified)**; DEV (Device component use); **ANST (Analytical study)**; USES (Uses)
(anodes; in amperometric sensors for determination of **peroxyacetic acid**)

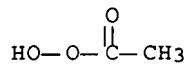
IT **7440-06-4, Platinum**, analysis
RL: **ARU (Analytical role, unclassified)**; DEV (Device component use); **ANST (Analytical study)**; USES (Uses)
(cathodes; in amperometric sensors for determination of **peroxyacetic acid**)

IT 25038-59-9, Polyethylene terephthalate, analysis
RL: **ARU (Analytical role, unclassified)**; DEV (Device component use); **ANST (Analytical study)**; USES (Uses)
(membranes; in amperometric sensors for determination of **peroxyacetic acid**)

IT 7783-90-6, Silver chloride (AgCl), analysis
RL: **ARU (Analytical role, unclassified)**; DEV (Device component use); **ANST (Analytical study)**; USES (Uses)
(reference **electrodes**; in amperometric sensors for determination of **peroxyacetic acid**)

IT **79-21-0, Peroxyacetic acid**
RL: **ANT (Analyte)**; PRP (Properties); **ANST (Analytical study)**

(amperometric sensors for determination of)
RN 79-21-0 HCAPLUS
CN Ethaneperoxoic acid (CA INDEX NAME)



IT **7722-84-1, Hydrogen peroxide**, analysis
RL: **ARU (Analytical role, unclassified)**; **ANST (Analytical study)**
(amperometric sensors for determination of **peroxyacetic acid** in presence of)
RN 7722-84-1 HCAPLUS
CN Hydrogen peroxide (H2O2) (CA INDEX NAME)

IT **7440-06-4, Platinum**, analysis
RL: **ARU (Analytical role, unclassified)**; DEV (Device component use); **ANST (Analytical study)**; USES (Uses)
(cathodes; in amperometric sensors for determination of **peroxyacetic acid**)
RN 7440-06-4 HCAPLUS
CN Platinum (CA INDEX NAME)

L121 ANSWER 4 OF 13 HCAPLUS COPYRIGHT 2007 ACS on STN
AN 1994:498764 HCAPLUS Full-text
DN 121:98764
TI Fractional determination of **peracetic acid** and **hydrogen peroxide**
IN Machida, Yasushi; Hashimoto, Akihiro; Hirakuri, Katsuko
PA Nippon Peroxide Co Ltd, Japan
SO Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DT **Patent**
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 06130051	A	19940513	JP 1992-303215	19921016 <--
JP 3170526	B2	20010528		
PRAI JP 1992-303215		19921016 <--		

AB The title method, suited for use in fractional determination of **peracetic acid** and **hydrogen peroxide** in a mixture of **peracetic acid**, **hydrogen peroxide** and acetic acid, comprises: (1) adding a slight excess of aqueous **KI** solution relative to **peracetic acid** to the mixd. solution, and determining **peracetic acid** concentration by titration of released I using Na thiosulfate standard

solution, and (2) adding a large excess of aqueous **KI** solution, dilute H2SO4, and aqueous ammonium **molybdate** solution, and determining **hydrogen peroxide** concentration by titration of further released I using standard Na thiosulfate solution

IC ICM **G01N0031-16**
ICS **G01N0031-00**

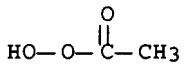
CC 79-6 (Inorganic Analytical Chemistry)
Section cross-reference(s): 72

ST **peracetic acid** detn **potentiometric** titrn; **hydrogen peroxide** detn **potentiometric** titrn; fractional titrn **peracetic acid** hydrogen peroxid

IT **79-21-0, Peracetic acid 7722-84-1,**
Hydrogen peroxide, analysis
RL: **ANT (Analyte)**; **ANST (Analytical study)**
(determination of, in **peracetic acid** and **hydrogen peroxide** and acetic acid mixture by **potentiometric** titration)

IT **79-21-0, Peracetic acid 7722-84-1,**
Hydrogen peroxide, analysis
RL: **ANT (Analyte)**; **ANST (Analytical study)**
(determination of, in **peracetic acid** and **hydrogen peroxide** and acetic acid mixture by **potentiometric** titration)

RN 79-21-0 HCAPLUS
CN Ethaneperoxoic acid (CA INDEX NAME)

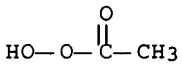


RN 7722-84-1 HCAPLUS
CN Hydrogen peroxide (H2O2) (CA INDEX NAME)

L121 ANSWER 5 OF 13 HCAPLUS COPYRIGHT 2007 ACS on STN
AN **1989:624509** HCAPLUS Full-text
DN 111:224509
TI Colorimetric method and reagent for determination of per acids
IN Fischer, Wolfgang; Arlt, Edda; Brabaender, Barbara
PA Merck Patent G.m.b.H., Fed. Rep. Ger.
SO Ger. Offen., 3 pp.
CODEN: GWXXBX
DT **Patent**
LA German
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 3743224	A1	19890629	DE 1987-3743224	19871219 <--
	EP 322631	A1	19890705	EP 1988-120784	19881213 <--
	EP 322631	B1	19910612		
	R: BE, CH, DE, FR, GB, IT, LI, NL				
	US 4900682	A	19900213	US 1988-285700	19881216 <--
	JP 01197653	A	19890809	JP 1988-318707	19881219 <--

JP 2640847 B2 19970813
PRAI DE 1987-3743224 A 19871219 <--
AB The sample solution is brought together with a chromogen, an **iodide** , and a **buffer**-containing reagent, and a color reaction is visually or spectrophotometrically evaluated. **Peracetic acid** in presence of **H2O2** can be determined Examples illustrate the use of tetramethylbenzidine and 4-chloro-1-naphthol.
IC ICM **G01N0031-22**
ICS **G01N0033-52; G01N0021-25**
ICA A61L0002-18
CC 79-3 (Inorganic Analytical Chemistry)
ST **peracetic acid** detn colorimetry; peracid detn colorimetry; methylbenzidine reagent **peracetic acid** detn colorimetry; benzidene reagent **peracetic acid** detn colorimetry; chloronaphthol reagent **peracetic acid** detn colorimetry; naphthol reagent **peracetic acid** detn colorimetry
IT **79-21-0, Peracetic acid**
RL: **ANT (Analyte); ANST (Analytical study)**
(determination of, colorimetric method and reagent for)
IT 604-44-4 **20461-54-5, Iodide**, uses and miscellaneous
34314-06-2
RL: ANST (Analytical study)
(in determination of per acids by colorimetry, reagent containing)
IT **79-21-0, Peracetic acid**
RL: **ANT (Analyte); ANST (Analytical study)**
(determination of, colorimetric method and reagent for)
RN 79-21-0 HCAPLUS
CN Ethaneperoxoic acid (CA INDEX NAME)



IT **20461-54-5, Iodide**, uses and miscellaneous
RL: ANST (Analytical study)
(in determination of per acids by colorimetry, reagent containing)
RN 20461-54-5 HCAPLUS
CN Iodide (CA INDEX NAME)

I-

L12 ANSWER 6 OF 13 HCAPLUS COPYRIGHT 2007 ACS on STN
AN **1988:582821** HCAPLUS Full-text
DN 109:182821
TI Determination of peracids in the presence of a very large excess of **hydrogen peroxide** using a rapid and convenient spectrophotometric method
AU Davies, D. Martin; Deary, Michael E.
CS Dep. Chem. Life Sci., Newcastle upon Tyne Polytech., Newcastle upon Tyne, NE1 8ST, UK
SO Analyst (Cambridge, United Kingdom) (**1988**), 113(9), 1477-9
CODEN: ANALAO; ISSN: 0003-2654
DT Journal

LA English

AB Peracids can be determined in the presence of up to a 1000-fold excess of **hydrogen peroxide** by taking advantage of the much greater rate of reaction of the peracid with **iodide**. A fast, convenient, and accurate spectrophotometric method is described that involves a simple linear extrapolation. The effects of a number of exptl. variables on the accuracy, precision, sensitivity, and selectivity of the method are described. The method has been applied to the determination of the **peracetic acid** formed during the perhydrolysis of p-nitrophenyl acetate.

CC 80-6 (Organic Analytical Chemistry)

ST peracid detn rapid spectrophotometry; **hydrogen peroxide** present peracid detn; **iodide** reagent peracid detn; nitrophenyl acetate perhydrolysis peracid detn; **peracetic acid** detn nitrophenyl acetate perhydrolysis

IT Acids, analysis
RL: **ANT (Analyte)**; **ANST (Analytical study)**
(peroxy, determination of, in presence of large excess of **hydrogen peroxide**, spectrophotometric)

IT Spectrochemical analysis
(spectrophotometric, for peracids, in presence of **hydrogen peroxide**, **iodide** in)

IT **79-21-0, Peracetic acid**
RL: **ANT (Analyte)**; **ANST (Analytical study)**
(determination of, in perhydrolysis of nitrophenyl acetate by spectrophotometry)

IT 937-14-4, m-Chloroperbenzoic acid
RL: **ANT (Analyte)**; **ANST (Analytical study)**
(determination of, in presence of large excess of **hydrogen peroxide**, spectrophotometric)

IT **7681-11-0, Potassium iodide (KI)**, uses and miscellaneous
RL: ANST (Analytical study); USES (Uses)
(in determination of peracids by spectrophotometry)

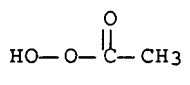
IT **7722-84-1, Hydrogen peroxide**, uses and miscellaneous
RL: **ANST (Analytical study)**; USES (Uses)
(peracid determination in presence of, by spectrophotometry)

IT 830-03-5, p-Nitrophenyl acetate
RL: RCT (Reactant); **ANST (Analytical study)**; RACT (Reactant or reagent)
(perhydrolysis of, **peracetic acid** determination in, by spectrophotometry)

IT **79-21-0, Peracetic acid**
RL: **ANT (Analyte)**; **ANST (Analytical study)**
(determination of, in perhydrolysis of nitrophenyl acetate by spectrophotometry)

RN 79-21-0 HCAPLUS

CN Ethaneperoxoic acid (CA INDEX NAME)



IT **7681-11-0, Potassium iodide (KI)**, uses and miscellaneous
RL: ANST (Analytical study); USES (Uses)
(in determination of peracids by spectrophotometry)

RN 7681-11-0 HCAPLUS

CN Potassium iodide (KI) (CA INDEX NAME)

I—K

IT **7722-84-1, Hydrogen peroxide**, uses and miscellaneous
RL: **ANST (Analytical study)**; USES (Uses)
(peracid determination in presence of, by spectrophotometry)
RN 7722-84-1 HCAPLUS
CN Hydrogen peroxide (H2O2) (CA INDEX NAME)

HO—OH

L121 ANSWER 7 OF 13 HCAPLUS COPYRIGHT 2007 ACS on STN
AN **1986:637583** HCAPLUS Full-text
DN 105:237583
TI Kinetic behaviors of **iodometry** for determining a solution containing peroxides
AU Chou, Tse Chuan; Hwang, Bing Joe; Lu, Meng Kung
CS Dep. Chem. Eng., Natl. Cheng Kung Univ., Tainan, 700, Taiwan
SO Journal of the Chinese Institute of Chemical Engineers (**1986**), 17(4), 215-22
CODEN: JCICAP; ISSN: 0368-1653
DT Journal
LA English
AB The kinetic theory of **iodometry** for determining a solution containing ≥1 peroxides is proposed and confirmed by the anal. of a system containing 2 peroxides, e.g., **H2O2-peracetic acid** and **peracetic acid**-acetaldehyde monoperacetic acid. The results indicate that temperature, strength of catalyst, and titration time are the main factors which affect the determination of peroxides in solution The relative rates of liberating I from **iodide** ion by each species of peroxides can be changed and controlled by changing the titration temperature or choosing a suitable amount of catalyst. The math. model describes the kinetic behaviors of each species of peroxide or the total peroxides in the solution are obtained. A good anal. can be obtained by applying the proposed kinetic theory of **iodometry.**
CC 79-6 (Inorganic Analytical Chemistry)
Section cross-reference(s): 80
ST peroxide detn **iodometry** kinetic theory; **hydrogen peroxide** detn **iodometry**; **peracetic acid** detn **iodometry**; acetaldehyde **peracetic acid** detn **iodometry**
IT Peroxides, analysis
RL: ANT (Analyte); ANST (Analytical study)
(determination of, kinetic theory of **iodometric**)
IT **Iodometry**
(in determination of peroxides, kinetic theory of)
IT 7416-48-0 **7722-84-1**, analysis
RL: **ANT (Analyte)**; **ANST (Analytical study)**
(determination of, in binary mixture containing **peracetic acid**, kinetic theory of **iodometric**)
IT **79-21-0**

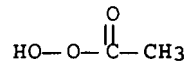
RL: **ANT (Analyte)**; **ANST (Analytical study)**
(determination of, in binary mixts. containing **hydrogen peroxide** or acetaldehyde monoperacetic acid, kinetic theory of **iodometric**)

IT **7722-84-1**, analysis
RL: **ANT (Analyte)**; **ANST (Analytical study)**
(determination of, in binary mixture containing **peracetic acid**, kinetic theory of **iodometric**)

RN 7722-84-1 HCAPLUS
CN Hydrogen peroxide (H2O2) (CA INDEX NAME)

IT **79-21-0**
RL: **ANT (Analyte)**; **ANST (Analytical study)**
(determination of, in binary mixts. containing **hydrogen peroxide** or acetaldehyde monoperacetic acid, kinetic theory of **iodometric**)

RN 79-21-0 HCAPLUS
CN Ethaneperoxoic acid (CA INDEX NAME)



L121 ANSWER 8 OF 13 HCAPLUS COPYRIGHT 2007 ACS on STN
AN **1985:588847** HCAPLUS Full-text
DN 103:188847
TI Continuous analysis of a sample containing a peroxy compound
IN Williams, John
PA Interox Chemicals Ltd., UK
SO Eur. Pat. Appl., 13 pp.
CODEN: EPXXDW
DT **Patent**
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 150123	A2	19850731	EP 1985-300380	19850121 <--
	EP 150123	A3	19880107		
	EP 150123	B1	19900307		
	R: AT, BE, DE, FR, GB, IT, NL				
	AU 8537914	A	19850725	AU 1985-37914	19850118 <--
	AU 567388	B2	19871119		
	AT 50866	T	19900315	AT 1985-300380	19850121 <--
	US 4680271	A	19870714	US 1985-693295	19850122 <--
PRAI	GB 1984-1630	A	19840121 <--		
	EP 1985-300380	A	19850121 <--		

AB A continuous process and apparatus for the anal. of a sample containing a peroxy compound in the presence of **H2O2**, using known colorimetric techniques, is characterized in that a sample is taken continuously, is continuously mixed with a colorimetric reagent and is divided into 2 streams, and continuous differential colorimetric anal. of the 2 streams is effected to provide a differential signal. One of the streams is heated so that the peroxy compound

reacts with the colorimetric reagent prior to effecting the anal., whereby the differential signal is a measure of the concentration of the peroxy compound The process and apparatus may be modified in that a 3rd stream is taken not containing any colorimetric reagent, and the 2 differential colorimetric anal. are effected, whereby a further signal is obtained which is a measure of the concentration of the **H2O2**. A control process using a differential signal produced by the process of apparatus may be used to control the addition of peroxy compound to the body from which the sample is taken.

IC ICM **G01N0021-78**

CC 80-2 (Organic Analytical Chemistry)
Section cross-reference(s): 79

ST peroxy compd detn differential colorimetry; **hydrogen peroxide** detn differential colorimetry; continuous analysis differential colorimetry app

IT Hydroperoxides
RL: **ANT (Analyte)**; **ANST (Analytical study)**
(determination of, in presence of **hydrogen peroxide**, apparatus for continuous spectrophotometric)

IT Peroxides, analysis
RL: **ANT (Analyte)**; **ANST (Analytical study)**
(organic, determination of, in presence of **hydrogen peroxide**, apparatus for continuous spectrophotometric)

IT Spectrochemical analysis
(spectrophotometric, for peroxy compds. in presence of **hydrogen peroxide**, apparatus for continuous)

IT **79-21-0**
RL: **ANT (Analyte)**; **ANST (Analytical study)**
(determination of, in presence of **hydrogen peroxide**, apparatus for continuous spectrophotometric)

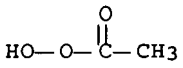
IT **7722-84-1**, analysis
RL: **ANT (Analyte)**; **ANST (Analytical study)**
(determination of, in presence of peroxy compds., apparatus for continuous spectrophotometric)

IT **12680-49-8**
RL: **ANST (Analytical study)**
(in determination of **peracetic acid** in presence of **hydrogen peroxide**, by spectrophotometry)

IT **79-21-0**
RL: **ANT (Analyte)**; **ANST (Analytical study)**
(determination of, in presence of **hydrogen peroxide**, apparatus for continuous spectrophotometric)

RN 79-21-0 HCAPLUS

CN Ethaneperoxoic acid (CA INDEX NAME)



IT **7722-84-1**, analysis
RL: **ANT (Analyte)**; **ANST (Analytical study)**
(determination of, in presence of peroxy compds., apparatus for continuous spectrophotometric)

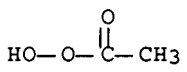
RN 7722-84-1 HCAPLUS

CN Hydrogen peroxide (H2O2) (CA INDEX NAME)

IT **12680-49-8**
RL: **ANST (Analytical study)**
(in determination of **peracetic acid** in presence of **hydrogen peroxide**, by spectrophotometry)
RN 12680-49-8 HCAPLUS
CN Molybdenum sodium oxide (CA INDEX NAME)

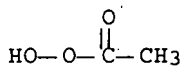
Component	Ratio	Component Registry Number
O	x	17778-80-2
Na	x	7440-23-5
Mo	x	7439-98-7

L121 ANSWER 9 OF 13 HCAPLUS COPYRIGHT 2007 ACS on STN
AN **1984:443683** HCAPLUS Full-text
DN 101:43683
TI A modified method for titrimetric determination of **peracetic acid**
AU Senf, H. J.
CS Hohenmoelsen, DDR-4860, Ger. Dem. Rep.
SO Zentralblatt fuer Pharmazie, Pharmakotherapie und Laboratoriumsdiagnostik (**1984**), 123(2), 77-9
CODEN: ZPPLBF; ISSN: 0049-8696
DT Journal
LA German
AB **Peracetic acid** [**79-21-0**] was determined in disinfectant containing **H2O2** by mixing 20 mL disinfectant with 1 g NaF and titrating with 0.1N KMnO4 until the pink color remains. The solution is then mixed with **KI**, and the I formed is titrated with 0.1N Na2S2O3 with starch indicator. The NaF binds Mn2+ formed in the removal of **H2O2** with KMnO4 and prevents interference in the subsequent titration of **peracetic acid.** Results agreed well with those of the reference method (Greenspan, F.R.; McKellar, D.G., 1948).
CC 64-3 (Pharmaceutical Analysis)
IT **79-21-0**
RL: **ANT (Analyte)**; **ANST (Analytical study)**
(determination of, in disinfectants containing **hydrogen peroxide** by titration)
IT **79-21-0**
RL: **ANT (Analyte)**; **ANST (Analytical study)**
(determination of, in disinfectants containing **hydrogen peroxide** by titration)
RN 79-21-0 HCAPLUS
CN Ethaneperoxoic acid (CA INDEX NAME)



L121 ANSWER 10 OF 13 HCAPLUS COPYRIGHT 2007 ACS on STN
AN **1974:581025** HCAPLUS Full-text
DN 81:181025
TI Kinetic analysis of mixtures of performic and **peracetic acids** in the presence of **hydrogen peroxide**

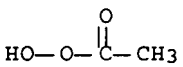
AU Shapilov, O. D.; Kostyukovskii, Ya. L.
CS S. M. Kirov Mil. Med. Acad., Leningrad, USSR
SO Zhurnal Analiticheskoi Khimii (1974), 29(8), 1643-5
CODEN: ZAKHA8; ISSN: 0044-4502
DT Journal
LA Russian
AB Optimum conditions for the determination of performic and **peracetic acid** in their mixts. in the presence of **H2O2** are: 35°, **pH** 5.5 (**buffer** KH2PO4 + Na2HPO4), and Na or Ba diphenylaminesul-fonate (1% solution) as the reducing agent. The fixed-time method was used for the determination; the optimum time interval was 10 min. The sum of both acids is determined **iodometrically** or photometricallywith benzidine. The rate of oxidation of diphenylaminesulfonate by performic acid is higher than that of oxidation by **peracetic acid**; the performic acid concentration can be determined from C1 = (A - k2a)/ (k1 - k2), where A1 and A2 are absorbances of solns., prepared by oxidation of the reducing agent with performic and **peracetic acids**, resp., k1 and k2 are slopes of the calibration curves, and a is C1 + C2. C2 is the **peracetic acid** concentration and is found by difference. The sensitivity of the method is 1 + 10-3M with a 6% error.
CC 80-6 (Organic Analytical Chemistry)
ST performic **peracetic acid** detn kinetic
IT 107-32-4
RL: **ANT (Analyte)**; **ANST (Analytical study)**
(determination of, in presence of **hydrogen peroxide** and **peracetic acid**, kinetic)
IT **79-21-0**
RL: **ANT (Analyte)**; **ANST (Analytical study)**
(determination of, in presence of **hydrogen peroxide** and performic acid, kinetic)
IT 1300-92-1 30582-09-3
RL: **ANST (Analytical study)**
(in determination of performic and **peracetic acids** in presence of each other and **hydrogen peroxide**, kinetic)
IT **7722-84-1**, analysis
RL: **ANST (Analytical study)**
(**peracetic acid** and performic acid determination in presence of)
IT **79-21-0**
RL: **ANT (Analyte)**; **ANST (Analytical study)**
(determination of, in presence of **hydrogen peroxide** and performic acid, kinetic)
RN 79-21-0 HCAPLUS
CN Ethaneperoxoic acid (CA INDEX NAME)



IT **7722-84-1**, analysis
RL: **ANST (Analytical study)**
(**peracetic acid** and performic acid determination in presence of)
RN 7722-84-1 HCAPLUS
CN Hydrogen peroxide (H2O2) (CA INDEX NAME)

HO—OH

L121 ANSWER 11 OF 13 HCAPLUS COPYRIGHT 2007 ACS on STN
AN 1969:64160 HCAPLUS Full-text
DN 70:64160
TI Photometric determination of peroxy acids in the presence of **hydrogen peroxide**
AU Shapilov, O. D.
CS Military Med. Acad., Leningrad, USSR
SO Zhurnal Analiticheskoi Khimii (1968), 23(12), 1857-8
CODEN: ZAKHA8; ISSN: 0044-4502
DT Journal
LA Russian
AB The determination of peroxy acids (AcOOH, EtCO2OH, and HOO2C(CH2)4CO2OH) in the presence of <0.5% **H2O2** is based on a selective oxidation of m-phenylenediamine (I) by the resp. peroxy acid in aqueous medium at **pH** 2-2.1 and 50-5° for 30-40 min. (or at room temperature for 4-4.5 hrs.); the solution is then red-brown colored. I is not affected by **H2O2**. The solution measured consists of 5 ml. **buffer** solution (KCl + HCl), 5 ml. 0.0005-0.004M peroxy acid solution containing **H2O2**, and 0.5 ml. 2% I solution in H2O or EtOH; the reference solution consists of 5 ml. **buffer**, 5 ml. H2O, 1 drop of 5-10% **H2O2**, and 0.5 ml. I. The absorbance (measured in a 0.5-cm. cell at 360 mμ) is proportional to concns. of 0.001-0.04% of peroxy acid. Peroxy acid can be determined in the concentration range 0.001-100%. The results of this method agree well with those of **iodometric**-permanganate method.
CC 80 (Organic Analytical Chemistry)
IT Peroxy acids
RL: **ANT (Analyte)**; **ANST (Analytical study)**
(determination of, in presence of **hydrogen peroxide**)
IT **79-21-0** 4212-43-5 5824-51-1
RL: **ANT (Analyte)**; **ANST (Analytical study)**
(determination of, in presence of **hydrogen peroxide**)
IT **79-21-0**
RL: **ANT (Analyte)**; **ANST (Analytical study)**
(determination of, in presence of **hydrogen peroxide**)
RN 79-21-0 HCAPLUS
CN Ethaneperoxoic acid (CA INDEX NAME)



L121 ANSWER 12 OF 13 HCAPLUS COPYRIGHT 2007 ACS on STN
AN 1968:424266 HCAPLUS Full-text
DN 69:24266
TI Determination of **hydrogen peroxide**, **peracetic acid**, and acetyl peroxide present together
AU Nichugovskii, G. F.; Vinogradova, E. V.; Dobychin, S. L.
CS Gos. Inst. Prilk. Khim., Leningrad, USSR
SO Zhurnal Analiticheskoi Khimii (1968), 23(4), 627-9
CODEN: ZAKHA8; ISSN: 0044-4502
DT Journal
LA Russian

AB A method is suggested for the determination of **H2O2** and **peracetic acid** in the presence of acetyl peroxide by **potentiometric** titration with sulfite. Determine **H2O2** in an aliquot by titration with Ce(IV) in the presence of ferroin or without it. In the latter case the appearance of a yellow color indicates the equivalence point. In a 2nd aliquot, determine the sum of **H2O2** and **peracetic acid** by **potentiometric** titration with sulfite in 20-40% HOAc. The total peroxides can be determined by titration of the I formed after addition of N **KI** in 20% HOAc to a 3rd aliquot with Na2S2O3 after 2 hrs. standing. The error is <1%.

CC 79 (Inorganic Analytical Chemistry)

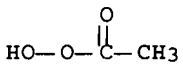
ST peroxides detn; **hydrogen peroxide** detn; acetyl peroxide detn; **peracetic acid** detn; sulfites titrn of peroxides

IT **79-21-0** **7722-84-1**, analysis
RL: **ANT (Analyte)**; **ANST (Analytical study)**
(determination of, in presence of acetyl peroxide)

IT **79-21-0** **7722-84-1**, analysis
RL: **ANT (Analyte)**; **ANST (Analytical study)**
(determination of, in presence of acetyl peroxide)

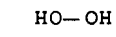
RN 79-21-0 HCAPLUS

CN Ethaneperoxoic acid (CA INDEX NAME)



RN 7722-84-1 HCAPLUS

CN Hydrogen peroxide (H2O2) (CA INDEX NAME)



L121 ANSWER 13 OF 13 HCAPLUS COPYRIGHT 2007 ACS on STN

AN **1967:417592** HCAPLUS Full-text

DN 67:17592

TI Microdetermination of peroxides by kinetic colorimetry

AU Purcell, Thomas C.; Cohen, Israel R.

CS Public Health Serv., Cincinnati, OH, USA

SO Environmental Science and Technology (1967), 1(5), 27-9
CODEN: ESTHAG; ISSN: 0013-936X

DT Journal

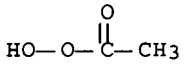
LA English

AB Fe(II) thiocyanate, neutral **KI**, and **molybdate** -catalyzed **KI** reagents were used for the analysis of γ quantities of a variety of peroxidic compds. by kinetic colorimetry. O3 and **peracetic acid** gave an immediate maximum color development with all 3 reagents. **H2O2** gave slow color development with neutral **KI** only. Acetyl peroxide, NO2, alkyl hydroperoxides, and peroxyacyl nitrates gave slow color development with all 3 reagents. The half lives of these colorimetric reactions were used to identify specific oxidants.

CC 79 (Inorganic Analytical Chemistry)

ST OXIDANT IDENTIFICATION; PEROXIDE DETN; OZONE DETN; **PERACETIC ACID** DETN; NITROGEN DIOXIDE DETN; **HYDROGEN PEROXIDE** DETN; ACETYL PEROXIDE DETN; ALLYL HYDROPEROXIDE DETN; PEROXYACYL NITRATE DETN; COLORIMETRY KINETIC PEROXIDE; KINETIC COLORIMETRY

PEROXIDE
IT **79-21-0** 110-22-5 **7722-84-1**, analysis 10028-15-6, analysis 10102-44-0, analysis 14915-07-2, analysis
RL: **ANT (Analyte)**; **ANST (Analytical study)**
(determination of, by kinetic colorimetry)
IT **79-21-0** **7722-84-1**, analysis
RL: **ANT (Analyte)**; **ANST (Analytical study)**
(determination of, by kinetic colorimetry)
RN 79-21-0 HCAPLUS
CN Ethaneperoxoic acid (CA INDEX NAME)



RN 7722-84-1 HCAPLUS
CN Hydrogen peroxide (H2O2) (CA INDEX NAME)

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L122 ANSWER 1 OF 3 HCAPLUS COPYRIGHT 2007 ACS on STN
AN 2004:719675 HCAPLUS Full-text
DN 142:344027
TI Bioelectrochemistry of molecular oxygen and reactive oxygen species 123.electroanalysis of PAA and **H2O2**: use of **iodide/iodine** couple as a probing potential **buffer**
AU **Awad, Mohamed Ismail**; **Ohsaka, Takeo**
CS Department of Electronic Chemistry, Interdisciplinary Graduate School of Science and Engineering, Tokyo Institute of Technology, Midori-ku, Yokohama, 226-8502, Japan
SO Chemical Sensors (2004), 20(Suppl. A), 154-156
CODEN: KAGSEU
PB Denki Kagakkai Kagaku Sensa Kenkyukai
DT Journal
LA English
AB A simple and rapid **potentiometric** method for the simultaneous anal. of **peroxyacetic acid** (PAA) and **hydrogen peroxide** (**H2O2**) has been proposed using glassy **carbon** (GC) as an indicator **electrode** and I2/I- as a probing potential **buffer**. On the basis of the large difference in the reaction rates of PAA and **H2O2** with I-, a transient potential response corresponding to the reactions of the two species with I- was observed, typically a few seconds and several minutes for PAA and **H2O2**, resp. The effects of the concns. of **molybdate** catalyst, H+, I2, and I- in the potential **buffer** on the selectivity as well as the sensitivity were examined The potential response obtained using the GC indicator **electrode** was found to be Nernstian over a wide range of their concns. (typically from micromolar to millimolar) with slopes of 30.5 and 29.5 mV for PAA and **H2O2**, resp. (in close agreement with the theor. value, i.e., 29.6 mV). O2 was found to have no substantial effect on the potential change at the GC **electrode** in the present potential **buffer**.
CC 72-2 (Electrochemistry)
Section cross-reference(s): 79

ST electroanalysis **peroxyacetic acid hydrogen peroxide buffer iodide iodine** couple

IT Biochemistry
Electrochemistry
(electrobiochem.; use of **iodide/iodine** couple as probing potential **buffer** in electroanal. of **peroxyacetic acid** and **H2O2**)

IT Reaction kinetics
(**iodide/iodine** couple as probing potential **buffer** in electroanal. of **peroxyacetic acid** and **H2O2** on)

IT **Buffers**
Electrochemical analysis
Potentiometry
(use of **iodide/iodine** couple as probing potential **buffer** in electroanal. of **peroxyacetic acid** and **H2O2**)

IT 64-19-7, Acetic acid, uses 71-50-1, Acetate, uses
RL: NUU (Other use, unclassified); USES (Uses)
(electroanal. of **peroxyacetic acid** and **H2O2** with **iodide/iodine** couple in acetate **buffer** solution containing)

IT **7440-44-0, Carbon**, uses
RL: DEV (Device component use); USES (Uses)
(glassy; use of **iodide/iodine** couple as probing potential **buffer** in electroanal. of **peroxyacetic acid** and **H2O2** on)

IT **14259-85-9**
RL: CAT (Catalyst use); USES (Uses)
(**iodide/iodine** couple as probing potential **buffer** in electroanal. of **peroxyacetic acid** and **H2O2** on glassy **carbon electrode** using)

IT **79-21-0, Peroxyacetic acid 7722-84-1, Hydrogen peroxide**, analysis
RL: **ANT (Analyte)**; **ANST (Analytical study)**
(use of **iodide/iodine** couple as probing potential **buffer** in electroanal. of **peroxyacetic acid** and **H2O2**)

IT **7553-56-2, Iodine**, reactions **20461-54-5, Iodide**, reactions
RL: CPS (Chemical process); PEP (Physical, engineering or chemical process); RCT (Reactant); PROC (Process); RACT (Reactant or reagent)
(use of **iodide/iodine** couple as probing potential **buffer** in electroanal. of **peroxyacetic acid** and **H2O2**)

IT **7440-44-0, Carbon**, uses
RL: DEV (Device component use); USES (Uses)
(glassy; use of **iodide/iodine** couple as probing potential **buffer** in electroanal. of **peroxyacetic acid** and **H2O2** on)

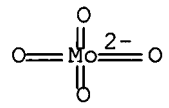
RN 7440-44-0 HCAPLUS
CN Carbon (CA INDEX NAME)

C

IT **14259-85-9**

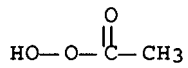
RL: CAT (Catalyst use); USES (Uses)
(iodide/iodine couple as probing potential buffer in electroanal. of peroxyacetic acid and H2O2 on glassy carbon electrode using)

RN 14259-85-9 HCAPLUS
CN Molybdate (MoO42-), (T-4)- (9CI) (CA INDEX NAME)



IT 79-21-0, Peroxyacetic acid 7722-84-1
, Hydrogen peroxide, analysis
RL: ANT (Analyte); ANST (Analytical study)
(use of iodide/iodine couple as probing potential buffer in electroanal. of peroxyacetic acid and H2O2)

RN 79-21-0 HCAPLUS
CN Ethaneperoxoic acid (CA INDEX NAME)



RN 7722-84-1 HCAPLUS
CN Hydrogen peroxide (H2O2) (CA INDEX NAME)

IT 7553-56-2, Iodine, reactions 20461-54-5,
Iodide, reactions
RL: CPS (Chemical process); PEP (Physical, engineering or chemical process); RCT (Reactant); PROC (Process); RACT (Reactant or reagent)
(use of iodide/iodine couple as probing potential buffer in electroanal. of peroxyacetic acid and H2O2)

RN 7553-56-2 HCAPLUS
CN Iodine (CA INDEX NAME)

RN 20461-54-5 HCAPLUS
CN Iodide (CA INDEX NAME)

I-

RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Awad, M	2001	73	1839	Anal Chem	HCAPLUS
Awad, M	2003	75	2688	Anal Chem	HCAPLUS
Awad, M	2001	34	1215	Anal Lett	HCAPLUS
Awad, M	2000	68	895	Electrochemistry	HCAPLUS
Awad, M	2003	544	35	J Electroanal Chem	HCAPLUS
Davies, D	1988	113	1477	Analyst	HCAPLUS
Frew, J	1983	155	139	Anal Chim Acta	HCAPLUS
Greenspan, F	1948	20	1061	Anal Chem	HCAPLUS
Lun, F	1983	145	151	Anal Chim Acta	
Sully, B	1962	87	653	Analyst	HCAPLUS
Swern, D	1970	1	362	Organic Peroxides	
Yuan, Z	1997	75	37	Can J Chem Eng	HCAPLUS

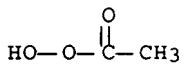
L122 ANSWER 2 OF 3 HCAPLUS COPYRIGHT 2007 ACS on STN
AN 2003:326569 HCAPLUS Full-text
DN 138:330872
TI Simultaneous **Potentiometric** Determination of **Peracetic Acid** and **Hydrogen Peroxide**
AU **Awad, Mohamed Ismail**; Oritani, Tadato; **Ohsaka, Takeo**
CS Department of Electronic Chemistry, Interdisciplinary Graduate School of Science and Engineering, Tokyo Institute of Technology, Yokohama, 226-8502, Japan
SO Analytical Chemistry (2003), 75(11), 2688-2693
CODEN: ANCHAM; ISSN: 0003-2700
PB American Chemical Society
DT Journal
LA English
AB A rapid and highly selective **potentiometric** method for the simultaneous anal. of **peracetic acid** (PAA) and **H2O2** is proposed, for the 1st time, using glassy C (GC) as an indicator **electrode** and I2/I- potential **buffer**. From the large difference in the reaction rates of PAA and **H2O2** with I-, which was confirmed using stopped-flow spectrophotometry, a transient potential response corresponding to the reactions of the two species with I- was observed The response times were typically a few seconds and several minutes for PAA and **H2O2**, resp. The effects of the concns. of **molybdate** catalyst, H+, I2, and I- in the potential **buffer** on the selectivity as well as the sensitivity were examined The potential response obtained using the GC indicator **electrode** is Nernstian over a wide range of their concns. (typically from micromolar to millimolar) with slopes of 30.5 and 29.5 mV for PAA and **H2O2**, resp. (in close agreement with the theor. value, i.e., 29.6 mV). O2 has no substantial effect on the potential change at the GC **electrode** in the present potential **buffer**.
CC 79-6 (Inorganic Analytical Chemistry)
Section cross-reference(s): 80
ST **potentiometric** detn **peracetic acid hydrogen peroxide**
IT **Potentiometry**
(simultaneous **potentiometric** determination of **peracetic acid** and **hydrogen peroxide**)
IT **79-21-0, Peracetic acid 7722-84-1, Hydrogen peroxide**, analysis
RL: **ANT (Analyte)**; **ANST (Analytical study)**
(simultaneous **potentiometric** determination of **peracetic**

acid and **hydrogen peroxide**)

IT **20461-54-5, Iodide**, uses
RL: **ARG (Analytical reagent use)**; **ANST (Analytical study)**; USES (Uses)
(simultaneous **potentiometric** determination of **peracetic** acid and **hydrogen peroxide**)

IT **79-21-0, Peracetic acid 7722-84-1, Hydrogen peroxide**, analysis
RL: **ANT (Analyte)**; **ANST (Analytical study)**
(simultaneous **potentiometric** determination of **peracetic** acid and **hydrogen peroxide**)

RN 79-21-0 HCAPLUS
CN Ethaneperoxoic acid (CA INDEX NAME)



RN 7722-84-1 HCAPLUS
CN Hydrogen peroxide (H2O2) (CA INDEX NAME)

IT **20461-54-5, Iodide**, uses
RL: **ARG (Analytical reagent use)**; **ANST (Analytical study)**; USES (Uses)
(simultaneous **potentiometric** determination of **peracetic** acid and **hydrogen peroxide**)

RN 20461-54-5 HCAPLUS
CN Iodide (CA INDEX NAME)

RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Awad, M	2001	73	1839	Anal Chem	HCAPLUS
Awad, M	2001	34	1215	Anal Lett	HCAPLUS
Awad, M	2000	68	895	Electrochemistry	HCAPLUS
Awad, M	2003	344	253	Inorg Chim Acta	HCAPLUS
Ball, D	1994	78	133	J Am Chem Soc	
Cheremisinoff, N	2000			Handbook of Hazardou	
Copper, C	1999	288	229	Inorg Chim Acta	HCAPLUS
Davies, D	1988	113	1477	Analyst	HCAPLUS
Di Furia, F	1984	109	985	Analyst	HCAPLUS
Di Furia, F	1988	113	793	Analyst	HCAPLUS
Douglas, A	1982		375	Fundamentals of Anal	
Effkemann, S	1998	70	3857	Anal Chem	HCAPLUS
Effkemann, S	1999	855	551	J Chromatogr, A	HCAPLUS
Frew, J	1983	155	139	Anal Chim Acta	HCAPLUS

Garcia, F	1969	13	222A	Rev Soc Quim Mex	
Greenspan, F	1948	20	1061	Anal Chem	HCAPLUS
Hadjiioanou, T	1975	36	17	Anal Chim Acta	
Karunakaran, C	1995	20	463	Transition Met Chem	
Koubek, E	1963	85	2262	J Am Chem Soc	
Krussmann, H	1994	31	229	Tenside Surf Deterg	HCAPLUS
Ohura, H	1999	49	1003	Talanta	HCAPLUS
Pinkernell, U	1994	66	2599	Anal Chem	HCAPLUS
Pinkernell, U	1997	69	3623	Anal Chem	HCAPLUS
Pinkernell, U	1997	122	567	Analyst	HCAPLUS
Saltzman, E	1959	31	1914	Anal Chem	
Sully, B	1962	87	653	Analyst	HCAPLUS
Swern, D	1970	1	362	Organic Peroxides	
Vogel, A	1978			Vogel's Textbook of	
Yuan, Z	1997	75	37	Can J Chem Eng	HCAPLUS
Yuan, Z	1997	75	42	Can J Chem Eng	HCAPLUS
Z-Lun, F	1983	145	151	Anal Chim Acta	

L122 ANSWER 3 OF 3 HCAPLUS COPYRIGHT 2007 ACS on STN
AN 2003:176111 HCAPLUS Full-text
DN 138:395056
TI **Potentiometric** analysis of **peroxyacetic acid** in the presence of a large excess of **hydrogen peroxide**
AU **Awad, Mohamed Ismail; Ohsaka, Takeo**
CS Interdisciplinary Graduate School of Science and Engineering, Department of Electronic Chemistry, Tokyo Institute of Technology, Midori-ku, Yokohama, 226-8502, Japan
SO Journal of Electroanalytical Chemistry (2003), 544, 35-40
CODEN: JECHES
PB Elsevier Science B.V.
DT Journal
LA English
AB The **potentiometric** anal. of **peroxyacetic acid** (PAA) in the presence of a large excess of **H2O2**, ≤500 times the concns. of PAA, is presented. This method is based on the detection of the potential change of the glassy **carbon** indicator **electrode** in the I-/I2 potential **buffer** which is caused by the change in the concns. of I- and I2 as a result of the **redox** reaction of the PAA and/or **H2O2** with I-. Based on the fact that the reaction rate of PAA and I- is much faster than that of **H2O2** and I-, a high selective response for PAA was obtained. The different factors, such as the concns. of I- and I2 in the potential **buffer** , affecting the selectivity and sensitivity were studied. A good calibration curve for PAA, the slope of which is in close agreement with that expected from the Nernst equation, i.e., 29.6 mV per decade, was obtained with a correlation coefficient higher than 0.993. The detection limit for PAA was found to be in the micromolar range depending on the concentration of the coexistent **H2O2**.
CC 80-6 (Organic Analytical Chemistry)
ST **peroxyacetic acid** detn **hydrogen peroxide** soln **potentiometry**
IT **Potentiometry**
(**potentiometric** determination of **peroxyacetic acid** in presence of large excess of **hydrogen peroxide**)
IT **7553-56-2, Iodine**, uses **20461-54-5, Iodide**, uses
RL: **ARG (Analytical reagent use)**; **ANST (Analytical study)**; USES (Uses)
(potential **buffer**; **potentiometric** determination of **peroxyacetic acid** in presence of large excess of **hydrogen peroxide**)
IT **7722-84-1, Hydrogen peroxide**, analysis

RL: **AMX (Analytical matrix)**; **ANST (Analytical study)**
(**potentiometric** determination of **peroxyacetic acid** in presence of large excess of **hydrogen peroxide**)

IT **79-21-0, Peroxyacetic acid**
RL: **ANT (Analyte)**; **ANST (Analytical study)**
(**potentiometric** determination of **peroxyacetic acid** in presence of large excess of **hydrogen peroxide**)

IT **7553-56-2, Iodine**, uses **20461-54-5, Iodide**, uses
RL: **ARG (Analytical reagent use)**; **ANST (Analytical study)**; USES (Uses)
(potential **buffer**; **potentiometric** determination of **peroxyacetic acid** in presence of large excess of **hydrogen peroxide**)

RN 7553-56-2 HCAPLUS
CN Iodine (CA INDEX NAME)

I—I

RN 20461-54-5 HCAPLUS
CN Iodide (CA INDEX NAME)

I-

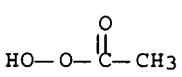
IT **7722-84-1, Hydrogen peroxide**, analysis
RL: **AMX (Analytical matrix)**; **ANST (Analytical study)**
(**potentiometric** determination of **peroxyacetic acid** in presence of large excess of **hydrogen peroxide**)

RN 7722-84-1 HCAPLUS
CN Hydrogen peroxide (H2O2) (CA INDEX NAME)

HO—OH

IT **79-21-0, Peroxyacetic acid**
RL: **ANT (Analyte)**; **ANST (Analytical study)**
(**potentiometric** determination of **peroxyacetic acid** in presence of large excess of **hydrogen peroxide**)

RN 79-21-0 HCAPLUS
CN Ethaneperoxoic acid (CA INDEX NAME)



RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File

Awad, M	2001	73	1839	Anal Chem	HCAPLUS
Awad, M				Anal Chem, submitted	
Awad, M	2001	34	1215	Anal Lett	HCAPLUS
Awad, M	2000	68	895	Electrochemistry	HCAPLUS
Awad, M	2003	344	253	Inorg Chim Acta	HCAPLUS
Baj, S	1994	350	159	Fresenius' J Anal Ch	HCAPLUS
Ball, D	1994	78	133	J Am Chem Soc	
Boullion, G	1983			The Chemistry of Fun	
Copper, C	1998	75	87	J Chem Educ	HCAPLUS
Davies, D	1988	113	1477	Analyst	HCAPLUS
Di Furia, F	1984	109	985	Analyst	HCAPLUS
Di Furia, F	1988	113	793	Analyst	HCAPLUS
D'Ans, J	1912	45	1845	Chem Ber	HCAPLUS
Effkemann, S	1998	70	3857	Anal Chem	HCAPLUS
Effkemann, S	1999	855	551	J Chromatogr A	HCAPLUS
Greenspan, F	1948	20	1061	Anal Chem	HCAPLUS
Jones, J	1983	155	139	Anal Chim Acta	
Koubek, E	1963	85	2262	J Am Chem Soc	
Krussmann, H	1994	31	229	Tenside Surf Deterg	HCAPLUS
Parcell, T	1967	1	431	Environ Sci Technol	
Pinkernell, U	1994	66	2599	Anal Chem	HCAPLUS
Pinkernell, U	1997	69	3623	Anal Chem	HCAPLUS
Pinkernell, U	1997	122	567	Analyst	HCAPLUS
Saltzman, E	1959	31	1914	Anal Chem	
Sully, B	1962	87	653	Analyst	HCAPLUS
Swern, D	1970	I		Organic Peroxides	
Vetter, K	1967			Electrochemical Kine	
Williams, J	1985			EP 0-150-123	HCAPLUS
Wylie, C	1953			Calculus	
Yuan, Z	1997	75	37	Can J Chem Eng	HCAPLUS
Yuan, Z	1997	75	42	Can J Chem Eng	HCAPLUS

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FILE LAST UPDATED: 27 JUL 2007 <20070727/UP>
MOST RECENT THOMSON SCIENTIFIC UPDATE: 200748 <200748/DW>
DERWENT WORLD PATENTS INDEX SUBSCRIBER FILE, COVERS 1963 TO DATE

>>> IPC Reform backfile reclassification has been loaded to 31 May 2007. No update date (UP) has been created for the reclassified documents, but they can be identified by 20060101/UPIC and 20061231/UPIC and 20060601/UPIC. <<<

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FOR DETAILS OF THE PATENTS COVERED IN CURRENT UPDATES, SEE
http://scientific.thomson.com/support/patents/coverage/latestupdates/

>>> FOR DETAILS ON THE NEW AND ENHANCED DERWENT WORLD PATENTS INDEX PLEASE SEE
http://www.stn-international.de/stndatabases/details/dwpi_r.html <<<
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L145 ANSWER 1 OF 6 WPIX COPYRIGHT 2007 THE THOMSON CORP on STN
AN 2003-774712 [73] WPIX Full-text
DNN N2003-621184 [73]
TI Concentration determination method for **peracetic acid** used in e.g. medical treatment, involves measuring variation in oxidation-reduction potential of platinum wire, due to reaction of **peracetic acid** and **iodide** ions
DC S03
IN ASA K; AWAD M I; HARNOOD T; KARNOOD T; MOHAMED I A; OHSAKA T; OSAKA T
PA (AWAD-I) AWAD M I; (CIRC-N) CIRCLE PROMOTION SCI & ENG; (HARN-I) HARNOOD T; (OHSA-I) OHSAKA T; (RICO-N) RICOH KYOSAN INC; (RIKO-N) RIKO KOSAN KK; (RIKO-N) ZH RIKOGAKU SHINKOKAI
CYC 32
PIA JP 2003294694 A 20031015 (200373)* JA 7[3]
WO 2003085393 A1 20031016 (200378) JA
JP 3504939 B2 20040308 (200418) JA 7
EP 1491885 A1 20041229 (200502) EN
US 20050084978 A1 20050421 (200531) EN
ADT JP 2003294694 A JP 2002-102110 20020404; JP 3504939 B2 JP 2002-102110 20020404; EP 1491885 A1 EP 2003-745897 20030403; WO 2003085393 A1 WO 2003-JP4273 20030403; EP 1491885 A1 WO 2003-JP4273 20030403; US 20050084978 A1 WO 2003-JP4273 20030403; US 20050084978 A1 US 2004-509179 20040927
FDT JP 3504939 B2 Previous Publ JP 2003294694 A; EP 1491885 A1 Based on WO 2003085393 A
PRAI JP 2002-102110 20020404
AN 2003-774712 [73] WPIX Full-text
AB JP 2003294694 A UPAB: 20060120
NOVELTY - The method involves adding solution comprising **peracetic acid** and **hydrogen peroxide** to a pH buffer solution comprising **molybdate** and **iodide** ions. The variation in oxidation- reduction potential of a platinum wire, due to reaction of **peracetic acid**, **hydrogen peroxide** and **iodide** ions, is measured.
USE - For determining concentration of **hydrogen peroxide** and **peracetic acid** used as disinfectant for medical treatment and foodstuff industry, in solution comprising **peracetic acid** and **hydrogen peroxide**, simultaneously.
ADVANTAGE - The concentration of **peracetic acid** and **hydrogen peroxide** are determined easily. DESCRIPTION OF DRAWINGS - The figure shows the graph of time change of electrode potential of platinum wire.(Drawing includes non-English language text).

L145 ANSWER 2 OF 6 WPIX COPYRIGHT 2007 THE THOMSON CORP on STN
AN 2000-117768 [11] WPIX Full-text
DNC C2000-036272 [11]
DNN N2000-089201 [11]
TI Electrochemical measuring cell with silicone membrane
DC E17; E36; J04; S03
IN REISS G
PA (REIS-I) REISS G
CYC 1
PIA DE 19830205 A1 20000113 (200011)* DE 6[3]
ADT DE 19830205 A1 DE 1998-19830205 19980707
PRAI DE 1998-19830205 19980707
AN 2000-117768 [11] WPIX Full-text
AB DE 19830205 A1 UPAB: 20050705
NOVELTY - The electrochemical measuring cell comprises inner electrodes (11) and an electrolyte chamber (12), divided by a membrane, (1) containing measuring liquid. The membrane is made of silicone.
USE - For measuring chlorine, chlorine dioxide, ozone, **hydrogen peroxide** and **peracetic acid** .

ADVANTAGE - Dislocation of the membrane is avoided. DESCRIPTION OF DRAWINGS - The drawing shows a cross-section of the cell.
Silicone membrane (1)
Carrier ring (2)
Electrode (11)
Electrolyte chamber (12)

TECH
INORGANIC CHEMISTRY - Preferred Cell: The membrane contains no pores or contains micropores, and is formed as a foam with a thickness of 0.05-1.0, preferably 0.125-0.25 mm. The membrane is tensioned in a carrier ring (2) or arranged in layers with a carrier material preferably made of a gauze or web. The ring (2) is made of special steel. The cell is especially a **hydrogen peroxide** measuring cell containing an electrolyte comprising buffer solution (pH 4), **potassium iodide** and ammonium **molybdate** tetrahydrate.

L145 ANSWER 3 OF 6 WPIX COPYRIGHT 2007 THE THOMSON CORP on STN
AN **1998-310006** [27] WPIX Full-text
DNC C1998-095403 [27]
DNN N1998-242997 [27]
TI Method for the determination of **peracetic acid** in the presence of **hydrogen peroxide** - gives improved detection levels for **iodine**
DC E17; J04; S03
PA (ANON-C) ANONYMOUS
CYC 1
PIA RD 407005 A 19980310 (199827)* EN 1[0]
ADT RD 407005 A RD 1998-407005 19980220
PRAI RD 1998-407005 19980220
AN **1998-310006** [27] WPIX Full-text
AB RD 407005 A UPAB: 20050521
The process and device for the determination of **peracetic acid** in the presence of **hydrogen peroxide**, may be improved by incorporating the method claimed in US 4900682. The detection of **iodine** which results from the following chemical reaction:
2H+ + CH3CO3H + 2I → CH3CO2H + I2 + H2O is difficult to achieve at 520-570 nm, when the **peracetic acid** concentration is inferior to 10 ppm. Such a detection is improved with the transformation of **iodine** with a chromogen compound such as N,N-diethyl p-phenylenediamine (Pdp).
ADVANTAGE - Detection levels are improved.

L145 ANSWER 4 OF 6 WPIX COPYRIGHT 2007 THE THOMSON CORP on STN
AN 1994-194197 [24] WPIX Full-text
DNC C1994-088431 [24]
DNN N1994-152903 [24]
TI Fractional determination of **peracetic acid** and **hydrogen peroxide** - by adding excess **potassium iodide** and titrating
DC E17; E36; J04; S03
IN HASHIMOTO A; HIRAKURI K; MACHIDA Y
PA (NIPX-C) NIPPON PEROXIDE CO LTD
CYC 1
PIA JP 06130051 A 19940513 (199424)* JA 5[0]
JP 3170526 B2 20010528 (200132) JA 5
ADT JP 06130051 A JP 1992-303215 19921016; JP 3170526 B2 JP 1992-303215 19921016
FDT JP 3170526 B2 Previous Publ JP 06130051 A
PRAI JP 1992-303215 19921016
AN 1994-194197 [24] WPIX Full-text

AB JP 06130051 A UPAB: 20050508
Fractional determination of **peracetic acid** and **hydrogen peroxide** in an aq soln contg **peracetic acid**, **hydrogen peroxide** and acetic acid is carried out by adding a little excess amt of **potassium iodide** with respect to **peracetic acid.** The liberated **iodine** is titrated with sodium thiosulphate standard liq to determine the **peracetic acid** concentration and **potassium iodide** aqueous solution (in excess amount of the equivalent with respect to the **hydrogen peroxide**), dil sulphuric acid and ammonium **molybdate** aq soln are added to the mixed soln to titrate the liberated **iodine** with sodium thiosulphate standard soln to determine the **hydrogen peroxide** concentration.
USE/ADVANTAGE - **Peracetic acid** concentration and **hydrogen peroxide** concentration can be determined correctly by one sampling.

Member(0002)
ABEQ JP 3170526 B2 UPAB 20050508
Fractional determination of **peracetic acid** and **hydrogen peroxide** in an aq soln contg **peracetic acid, hydrogen peroxide** and acetic acid is carried out by adding a little excess amt of **potassium iodide** with respect to **peracetic acid.** The liberated **iodine** is titrated with sodium thiosulphate standard liq to determine the **peracetic acid** concn. and **potassium iodide** aq. soln. (in excess amount of the equivalent with respect to the **hydrogen peroxide**), dil sulphuric acid and ammonium **molybdate** aq soln are added to the mixed soln to titrate the liberated **iodine** with sodium thiosulphate standard soln to determine the **hydrogen peroxide** concn..
USE/ADVANTAGE - **Peracetic acid** concn. and **hydrogen peroxide** concn. can be determined correctly by one sampling.

L145 ANSWER 5 OF 6 WPIX COPYRIGHT 2007 THE THOMSON CORP on STN
AN **1991-295773** [40] WPIX Full-text
DNC C1991-127903 [21]
DNN N1991-226529 [21]
TI Colorimetric determn. of solution concentration - uses pump activated in response to photometer cell measurement in order to add diluting or acidity adjusting solution
DC D13; D22; E36; J04; S03; X25
IN CRISINEL P; DE LA VARENDE J M; MALLARD DE LA VARENDE J; MALLARDDEV J
PA (AIRL-C) AIR LIQUIDE; (CAAL-C) AIR LIQUIDE CANADA LTEE; (AIRL-C) AIR LIQUIDE SA
CYC 15

PIA	WO 9114172	A	19910919 (199140)*	EN	
	FR 2659738	A	19910920 (199148)	FR	
	EP 472713	A	19920304 (199210)	EN	
	PT 97060	A	19930531 (199325)	PT	
	US 5438002	A	19950801 (199536)	EN	7[1]
	EP 472713	B1	19970820 (199738)	FR	11[1]
	DE 69127327	E	19970925 (199744)	DE	
	ES 2106777	T3	19971116 (199801)	ES	
	US 5756358	A	19980526 (199828)	EN	
	EP 472713	B2	20030502 (200330)	FR	

ADT FR 2659738 A FR 1990-3374 19900316; DE 69127327 E DE 1991-69127327 19910313; EP 472713 A EP 1991-906634 19910313; EP 472713 B1 EP 1991-906634 19910313; DE 69127327 E EP 1991-906634 19910313; ES 2106777 T3 EP 1991-906634 19910313; EP 472713 B2 EP 1991-906634 19910313; US 5438002 A

WO 1991-FR203 19910313; EP 472713 B1 WO 1991-FR203 19910313; DE 69127327 E WO 1991-FR203 19910313; US 5756358 A Div Ex WO 1991-FR203 19910313; EP 472713 B2 WO 1991-FR203 19910313; PT 97060 A PT 1991-97060 19910315; US 5438002 A US 1991-768279 19911001; US 5756358 A Div Ex US 1991-768279 19911001; US 5756358 A US 1995-438038 19950508

FDT DE 69127327 E Based on EP 472713 A; ES 2106777 T3 Based on EP 472713 A; US 5756358 A Div ex US 5438002 A; US 5438002 A Based on WO 9114172 A; EP 472713 B1 Based on WO 9114172 A; DE 69127327 E Based on WO 9114172 A; EP 472713 B2 Based on WO 9114172 A

PRAI FR 1990-3374 19900316

AN **1991-295773** [40] WPIX Full-text

AB WO 1991014172 A UPAB: 20060107
Colourimetric determin. by forming **iodine** or excess **iodide**, has the peracid content adjusted in the presence of **hydrogen peroxide** in a solution (2) with a molar concentration ratio of **hydrogen peroxide**/peracid no greater than 100. A pump (3) is used to draw a diluting and/or pH adjusting liquid (9) simultaneously into the intake circuits of two pumps (5,6) operating at the same flow rate. A photometer is used to measure the intensity of **iodine** colouration formed in a measuring tank, in order to control a regulator, determining the adjustment which it is required to make.
USE - Controlling peracid content in industrial disinfectant solutions. @(15pp Dwg.No.1/1)@

Member(0005)

ABEQ US 5438002 A UPAB 20060107
A colorimetric process for **adjustment** of per **acid** content in the presence of H2O2 in a (partially) **aq. soln.** (in which a molar ratio of (H2O2):(per acid) does **not exceed** 100, comprises: (1) drawing the soln. using three suction means operating at equivalent flow rates, which simultaneously draw at least one of a dilution and pH control liq.; (2) feeding soln. to a reference vat of a two beam photometer using second suction means; (3) feeding soln. to a measuring vat using third suction means; (4) adjusting flow rate of suction means so that flow draw by second and third means is less than 100 ppm by wt.; (5) adding excess iodide to measuring flow using a fourth suction means; (6) comparing intensity of iodine colour formed in measuring vat to a connected reference vat; and (7) transferring the difference in intensity to a regulator operating a pump for injection of a soln. of peracid into the soln. to be adjusted.
USE/ADVANTAGE - Used esp. for treating **peracetic acid** in disinfection processes. Can be used on an industrial scale. Device is automated, simple and inexpensive.

Member(0009)

ABEQ US 5756358 A UPAB 20060107
Colourimetric determin. by forming **iodine** or excess **iodide**, has the peracid content adjusted in the presence of **hydrogen peroxide** in a solution (2) with a molar concentration ratio of **hydrogen peroxide**/peracid no greater than 100. A pump (3) is used to draw a diluting and/or pH adjusting liquid (9) simultaneously into the intake circuits of two pumps (5,6) operating at the same flow rate.
A photometer is used to measure the intensity of **iodine** colouration formed in a measuring tank, in order to control a regulator, determining the adjustment which it is required to make.
USE - Controlling peracid content in industrial disinfectant solutions.

L145 ANSWER 6 OF 6 WPIX COPYRIGHT 2007 THE THOMSON CORP on STN
AN **1989-193513** [27] WPIX Full-text
DNC C1989-085583 [21]
DNN N1989-147979 [21]
TI Colorimetric determination of peracid in presence of **hydrogen peroxide** - using chromogen, **iodide** and opt. buffer, pref. impregnated into carrier
DC E17; J04; S03
IN ARLT E; BRABANDER B; FISCHER W
PA (MERE-C) MERCK PATENT GMBH
CYC 9
PIA DE 3743224 A 19890629 (198927)* DE 4[0]
EP 322631 A 19890705 (198927) DE
JP 01197653 A 19890809 (198938) JA
US 4900682 A 19900213 (199013) EN 4
EP 322631 B 19910612 (199124) EN
DE 3863285 G 19910718 (199130) DE
JP 2640847 B2 19970813 (199737) JA 3[0]
ADT DE 3743224 A DE 1987-3743224 19871219; DE 3863285 G DE 1987-3743224 19871219; EP 322631 A EP 1988-120784 19881213; US 4900682 A US 1988-285700 19881216; JP 01197653 A JP 1988-318707 19881219; JP 2640847 B2 JP 1988-318707 19881219
FDT JP 2640847 B2 Previous Publ JP 01197653 A
PRAI DE 1987-3743224 19871219
AN **1989-193513** [27] WPIX Full-text
AB DE 3743224 A UPAB: 20060105
Determination of peracids (I) comprises incubating a test solution with a reagent containing a chromogen, an **iodide** and opt. a buffer then spectrophotometric or visual evaluation of the resulting colour-forming reaction. The reagent itself is also new. The reagent, opt. impregnated into a matrix, contains tetramethylbenzidine (TMB), **KI** and phosphate buffer.
USE/ADVANTAGE - The method is used to determine **peracetic acid** (I) (widely used as a disinfectant) in presence of **H2O2**. The presence of an **iodide**, rather than an O2-transfer catalyst as in conventional reagents, means that (I) react quickly but **H2O2** hardly at all.

Member(0004)
ABEQ US 4900682 A UPAB 20060105
The concn of a peracid in a sample soln is determined by (a) mixing the sample **soln** with reagent contg a chromogen and an iodide and comparing the resultant colour of the mixt with a standard to determine the amt of peracid in the sample soln. Pref reagent further contains a buffer to effect a pH of 3-6. The colour of the resultant mixt is measured by spectrophotmetry. The sample soln contains H202.
ADVANTAGE - It is possible to determine peracids even in the presence of other peroxides. (4pp)s

Member(0007)
ABEQ JP 2640847 B2 UPAB 20060105
Determination of peracids (I) comprises incubating a test soln. with a reagent contg. a chromogen, an **iodide** and opt. a buffer then spectrophotometric or visual evaluation of the resulting colour-forming reaction. The reagent itself is also new.
The reagent, opt. impregnated into a matrix, contains tetramethylbenzidine (TMB), **KI** and phosphate buffer.
USE/ADVANTAGE - The method is used to determine **peracetic acid** (I) (widely used as a disinfectant) in presence of **H2O2**. The presence of an **iodide**, rather than an O2-transfer catalyst as in conventional reagents, means that (I) react

quickly but H2O2 hardly at all.

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                 E TSOGT/AU
                 E OHSAKA/AU
L2           348 S E50,E54
                 E TAKEO/AU
L3             1 S E3
                 E TAKEO O/AU
L4             1 S E6
                 E BACK E1
L5             5 S E8
                 E AWAD/AU
                 E AWAD M/AU
L6            30 S E3,E8
                 E AWAD MO/AU
L7            12 S E4,E7,E8,E9,E12
L8            17 S E13,E14
                 E ISMAIL/AU
L9            22 S E3
L10          123 S E4
L11           34 S E27
                 E ISMAIL AWAD/AU
                 E MOHAMED/AU
L12          110 S E3,E4
L13           19 S E30,E31
                 E MOHAMED AWAD/AU
                 E MOHAMED I/AU
L14            8 S E3,E4
L15            4 S E23,E24
                 E KARNOOD/AU
                 E RICOH/PA,CS
                 E RICOH KYOSAN/PA,CS
L16            8 S E5-E13
                 E RICOH KYOSAN/CO
L17            8 S E4,E5
                 E E4+ALL
                 E E1+ALL
L18        32432 S E2+RT
                 E RICOH/PA,CS
L19        32308 S E3,E4
L20        32308 S RICOH?/PA,CS,CO
L21            0 S L1 AND L2-L20
                 E RIKO/PA,CS
L22            8 S E31-E34
                 E RIKO/CO
L23            8 S E13
                 E E7+ALL
L24           12 S E2
                 E E2+ALL
L25            1 S L1 AND L22-L24
                 E OSAKA/AU
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                E OSAKA T/AU
L26           207 S E3
L27            37 S E13
                E OSAKA NAME/AU
                E TAKEO O/AU
L28             1 S E6
L29             1 S L1 AND L2-L28

     FILE 'REGISTRY' ENTERED AT 14:19:01 ON 01 AUG 2007
                E PERACETIC ACID/CN
L30             1 S E3
L31             1 S E4
                E HYDROGEN PEROXIDE/CN
L32             1 S E3
                E MOLYBDATE/CN
L33             1 S E3
                E MOLYBDATE
L34         11119 S E3 AND 1/NC
L35         10754 S L34 NOT SQL/FA
L36             1 S IODINE/CN
                E I/MF
L37           167 S E3
L38            68 S L37 NOT MASS
L39            99 S L37 NOT L38
                E POTASSIUM IODIDE/CN
L40             1 S E3
L41        309633 S MO/ELS OR 7439-98-7/CRN OR 7439-98-7 OR ?MOLYBD?/CNS
L42        298879 S L41 NOT L35
L43             5 S (PLATINUM OR GOLD OR CARBON)/CN OR 7782-42-5 OR 7782-40-3

     FILE 'HCAPLUS' ENTERED AT 14:24:03 ON 01 AUG 2007
L44          4539 S L30
L45          5095 S (PERACETIC OR PER ACETIC)()ACID
L46          1836 S (PEROXYACETIC OR PEROXY ACETIC OR PER OXYACETIC OR PER OXY AC
L47            40 S (PEROXOACETIC OR PEROXO ACETIC OR PER OXOACETIC OR PER OXO AC
L48           115 S (ETHANEPEROXOIC OR ETHANE PEROXOIC)()ACID
L49            24 S ACETIC PEROXIDE
L50             2 S PERACETICACID
L51          6841 S L44-L50
L52        103562 S L32
L53        204816 S HYDROGEN PEROXIDE OR HYDROGENPEROXIDE OR H2O2
L54          2404 S L51 AND L52,L53
L55            64 S L54 AND (L36 OR L38 OR L39 OR L40)
L56            21 S L54 AND (K OR POTASSIUM)()IODIDE
L57            32 S L54 AND KI
L58           147 S L54 AND (?IODIN? OR ?IODO?)
L59           181 S L55-L58

     FILE 'REGISTRY' ENTERED AT 14:29:40 ON 01 AUG 2007

     FILE 'HCAPLUS' ENTERED AT 14:29:40 ON 01 AUG 2007
L60              TRA L59 1- RN :     6076 TERMS

     FILE 'REGISTRY' ENTERED AT 14:29:48 ON 01 AUG 2007
L61          6073 SEA L60
L62             7 S L61 AND L33,L35,L42
L63             2 S L61 AND L34
L64             7 S L62,L63

     FILE 'HCAPLUS' ENTERED AT 14:31:00 ON 01 AUG 2007
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L65           9 S L64 AND L59
L66          12 S L59 AND ?MOLYBD?
L67           1 S L59 AND MO
L68          14 S L65,L66,L67
                E POTENTIOMETRY/CT
L69        3941 S E3-E5
                E E3+ALL
L70        5821 S E4+NT
                E E8+ALL
L71         722 S E9+OLD,NT
                E E9+ALL
L72         722 S E3+NT
                E POTENIOM/CT
                E POTENTIOM/CT
L73           6 S E4
L74        4972 S E5-E24
                E E24+ALL
L75         368 S E2
L76           3 S L68 AND L69-L75
L77           4 S L68 AND ?POTENTIOM?
L78           4 S L76,L77
L79          76 S L54 AND ?IODID?
L80         206 S L59,L79
L81          25 S L80 NOT L59

     FILE 'REGISTRY' ENTERED AT 14:35:23 ON 01 AUG 2007

     FILE 'HCAPLUS' ENTERED AT 14:35:23 ON 01 AUG 2007
L82             TRA L81 1- RN :      483 TERMS

     FILE 'REGISTRY' ENTERED AT 14:35:24 ON 01 AUG 2007
L83         483 SEA L82
L84           0 S L83 AND L33,L34,L35,L42

     FILE 'HCAPLUS' ENTERED AT 14:36:08 ON 01 AUG 2007
L85          19 S L54 AND L1-L29
                SEL RN

     FILE 'REGISTRY' ENTERED AT 14:36:47 ON 01 AUG 2007
L86          30 S E1-E30
L87           2 S L86 AND L33-L35,L42
L88           3 S L86 AND (I/ELS OR (?IODI? OR ?IODO?)/CNS OR L36-L40)

     FILE 'HCAPLUS' ENTERED AT 14:38:17 ON 01 AUG 2007
L89           4 S L87,L88 AND L85
L90           5 S L78,L89
L91         114 S L54 AND L51 (L) ANST+NT/RL
L92          95 S L91 AND (L52 OR L53)(L)ANST+NT/RL
L93          54 S L54 AND G01N/IPC,IC,ICM,ICS
L94         122 S L92,L93,L90
L95          43 S L94 AND PY<=2002 NOT P/DT
L96          41 S L94 AND (PD<=20020404 OR PRD<=20020404 OR AD<=20020404) AND
L97          84 S L95,L96
L98           1 S L97 AND L69-L75
L99           4 S L97 AND ?POTENTIOM?
L100         13 S L97 AND PH
L101         20 S L97 AND L59

     FILE 'REGISTRY' ENTERED AT 14:42:32 ON 01 AUG 2007
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     FILE 'HCAPLUS' ENTERED AT 14:42:32 ON 01 AUG 2007
L102            TRA L97 1- RN :      458 TERMS

     FILE 'REGISTRY' ENTERED AT 14:42:34 ON 01 AUG 2007
L103         458 SEA L102
L104         458 S L102
L105           3 S L104 AND L33-L35,L42

     FILE 'HCAPLUS' ENTERED AT 14:42:58 ON 01 AUG 2007
L106           3 S L105 AND L97
L107           2 S L106 AND L98-L101
L108           6 S L90,L107
L109          26 S L98-L101,L106 NOT L108
                 SEL AN 13 16-19,21,23-26
L110          10 S L109 AND E31-E50
L111          16 S L108,L110
L112          16 S L111 AND L1-L29,L44-L59,L65-L81,L85,L89-L101,L106-L111
L113          15 S L112 AND (?IODO? OR ?IODI? OR ?MOLYBD? OR KI OR POTASSIUM IOD
L114           9 S L112 AND (PH OR BUFFER? OR REDOX?)
L115           6 S L112 AND G01N/IPC,IC,ICM,ICS
L116           3 S L112 AND L43
L117           5 S L112 AND (PT OR AG OR C OR ?PLATINUM? OR ?GOLD? OR ?CARBON?)
L118          16 S L112-L117
L119           7 S L118 AND PY<=2002 NOT P/DT
L120           6 S L118 AND (PD<=20020404 OR PRD<=20020404 OR AD<=20020404) AND
L121          13 S L119,L120
L122           3 S L118 NOT L121

     FILE 'HCAPLUS' ENTERED AT 14:52:51 ON 01 AUG 2007

     FILE 'WPIX' ENTERED AT 14:53:34 ON 01 AUG 2007
L123        2457 S L45 OR L46 OR L47 OR L48 OR L49 OR L50
                 E PERACETIC/CN
L124           1 S E4,E5
L125         388 S ACETYL HYDROPEROXIDE OR PERACETATE OR PER ACETATE OR PERSTERI
L126        1203 S R00453/DCN OR 0453/DRN
L127        3084 S L123,L125,L126
L128       42055 S L53
                 E HYDROGEN PEROXIDE/CN
L129           1 S E3
L130       19768 S R01732/DCN OR 1732/DRN
L131        1438 S L127 AND L128,L130
                 E POTASSIUM IODIDE/CN
L132           1 S E3
L133        2378 S R01715/DCN OR 1715/DRN
L134        9782 S (K OR POTASSIUM)()IODIDE OR KI
L135          17 S L131 AND L133,L134
L136         142 S L131 AND (?IODI? OR ?IODO?)
L137         146 S L135,L136
L138           7 S L137 AND ?MOLYBD?
L139           3 S L138 AND G01N/IPC,IC,ICM,ICS
L140           4 S L138 NOT L139
L141          12 S L137 AND S03-E?/MC
L142           9 S L141 NOT L138
                 SEL AN 5 9
                 SEL AN 8
L143           3 S L142 AND E1-E3
L144           6 S L139,L143
L145           6 S L144 AND L123-L144
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FILE 'WPIX' ENTERED AT 15:03:49 ON 01 AUG 2007

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